



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,423	04/19/2004	Kyeong Hwan Doo	5895P057	5360
8791 7590 04/11/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			EXAMINER ROJAS, OMAR R	
			ART UNIT 2874	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/11/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/828,423

Applicant(s)

DOO ET AL.

Examiner

Omar Rojas

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-7 is/are rejected.
- 7) ☒ Claim(s) 4 and 8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/19/2004</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Detailed Action</u> . |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The prior art documents submitted by Applicant(s) in the Information Disclosure Statement(s) ("IDS") filed on 04/19/2004 have all been considered and made of record (note the attached copy of form(s) PTO-1449).

Drawings

3. Figures 2a, 2b, and 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "301" has been used in Fig. 8 to designate both the physical layer and the optical module interfacing means. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

Art Unit: 2874

prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 204. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities: On page 10, line 4, "physical layer 304" should read --physical layer 301--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Patent No. US 6,705,879 B2 to Engel et al. ("Engel").

In re claims 1-3, Engel discloses, in Figures 1-6, an optical module interfacing device 20, connected to a female connector 12 for an SFP type module for providing data transmission/reception functions through an UTP cable, comprising:

a board 33 having the same dimensions as those of the optical module;
a male connector (see the modified Figure 3 of Engle below), having the same dimensions as those of the optical module, formed at a side surface of one end of the board 33 and connected to the female connector 12 for the optical module mounted on a host board 11;
and

an RJ-45 female connector 21' provided with a plurality of pins 26 formed on an upper surface of the board, respectively corresponding to pins of the male connector, according to standards;

wherein the board 33 and the male connector have the same dimensions as the SFP type optical module (column 2, lines 32-35). For applicant's convenience, a modified version of Figure 3 of Engel is reproduced below that includes a label for the male connector.

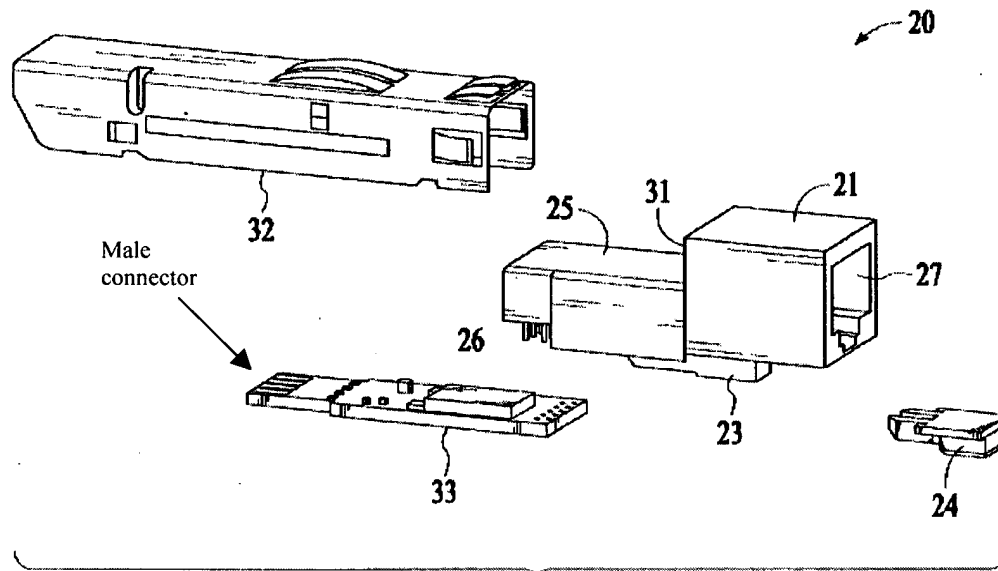


FIG. 3

9. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Patent No. US 6,876,838 B1 to Daly et al. ("Daly").

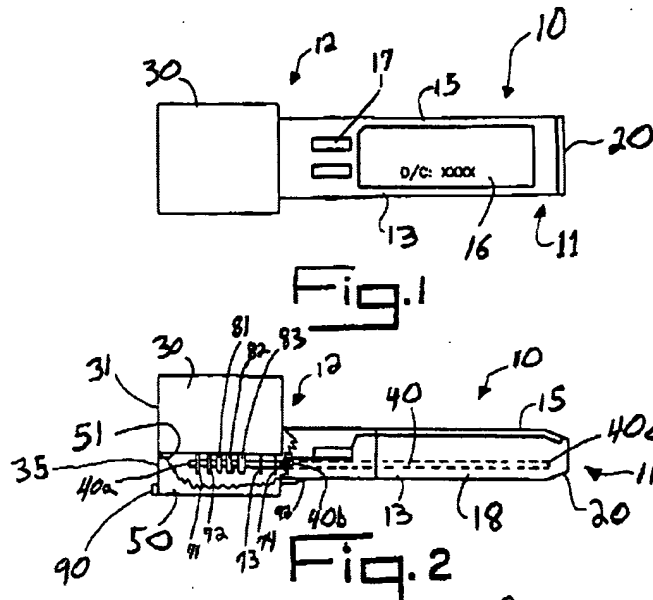
In re claims 1-3, Daly discloses, in Figures 1-5, an optical module interfacing device 10, connected to a host device for an SFP type module for providing data transmission/reception functions through an UTP cable, comprising:

a board 40 having the same dimensions as those of the optical module;

a male connector 20, having the same dimensions as those of the optical module, formed at a side surface of one end of the board 40 and connected to the host device; and

an RJ-45 female connector 30 provided with a plurality of pins 71-74 formed on an upper surface of the board, respectively corresponding to pins of the male connector 20, according to standards;

wherein the board 40 and the male connector have the same dimensions as the SFP type optical module (col. 3, line 64 to col. 4, line 2). Figures 1 and 2 of Daly are reproduced below.



Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2874

12. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No. US 6,533,470 B2 to Ahrens in view of Engel or Daly as applied to claims 1-3 above.

In re claims 5-7, Ahrens discloses an ethernet system (Figure 1) for supporting data communication through optical cables comprising:

a host board 30;

a physical layer (col. 4, lines 28-42), mounted on the host board, for supporting data communication through the optical cables;

an optical module 50/100 provided at an end of the optical cable, for converting an optical signal to an electric signal or an electric signal to an optical signal; and

an interfacing unit 40/42/44, mounted on the host board 30 and including a female connector 40 having the same dimensions as those of the optical module, for connecting the optical module 50/100 to optical data communication supporting ports of the physical layer when the optical module is inserted into the female connector

wherein the optical module 50/100 is detachably mounted on the interfacing unit 40/42/44. Figure 1 of Ahrens is reproduced below.

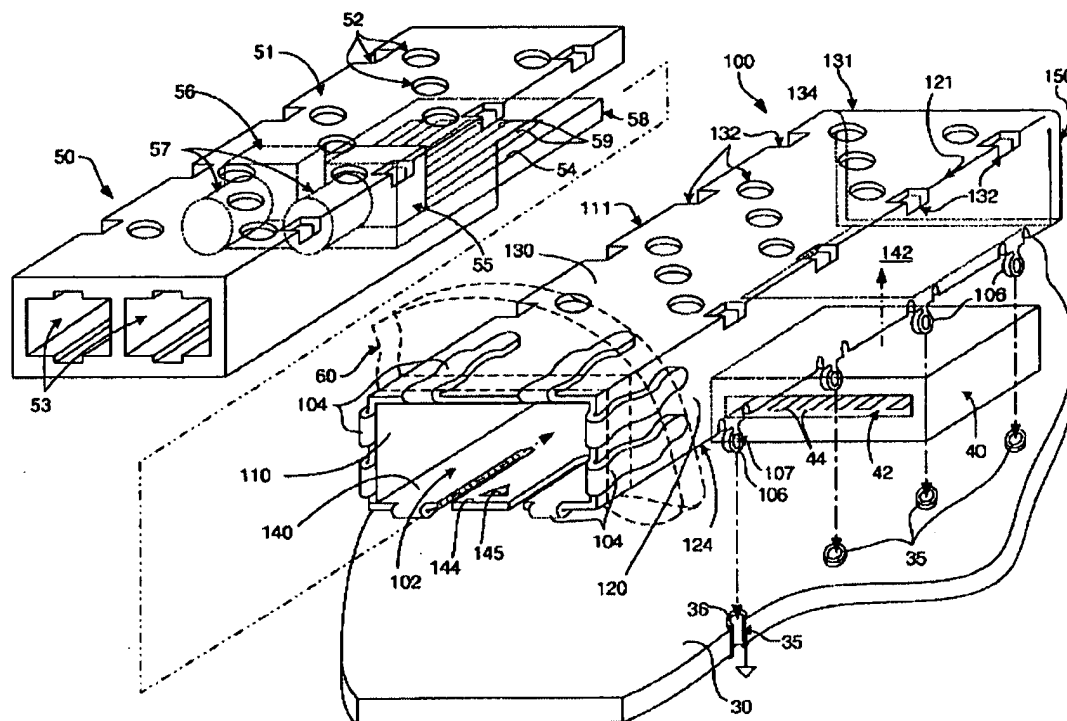


FIG. 1

Thus, Ahrens only differs from claims 5-7 in that Ahrens does not teach an optical module interfacing means provided at an end of a UTP cable having the limitations specified by claims 5-7.

Engel or Daly, as previously discussed with respect to claims 1-3, teach optical module interfacing means provided at an end of a UTP cable having all the limitations of claims 5-7 that are not specifically mentioned by Ahrens. See section nos. 8 or 9 above. The motivation for combining Engel or Daly with Ahrens would have been to connect both SFP and RJ-45 connectors to the same host board without increasing the number of ports or connectors on the host board itself, thereby saving valuable space. See Engel at col. 3, lines 1-9 or Daly at col. 1, lines 51-62. Therefore, it would have been obvious to one of ordinary skill in the art at the time

Art Unit: 2874

of the claimed invention to obtain the invention specified by claims 5-7 in view of Ahrens combined with Engel or Daly.

Allowable Subject Matter

13. Claims 4 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter:

Neither Engel nor Daly specifically mentions whether the optical module pins are configured as recited by claims 4 and 8. Furthermore, neither Engle nor Daly mentions using an interfacing circuit for converting power of the male connector into power of the RJ female connector through a regulator and supplying the power converted by the regulator to connection lines between the optical module pins as specified by claims 4 and 8. Lastly, there is insufficient evidence at this time such that a rejection of claims 4 or 8 under 35 U.S.C. § 102 or § 103 would be considered proper.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,731,510 B1 to Hwang et al. also appears to anticipate at least claim 1 but was not considered at this time to be more relevant than the Engle or Daly patents.

16. Applicant(s) are advised that unforeseeable amendments to the claims may result in a new grounds of rejection and a subsequent Final Rejection of the application. See MPEP § 706.07(a).


Any inquiry concerning this communication or earlier communications from the

Art Unit: 2874

examiner should be directed to Omar Rojas whose telephone number is (571) 272-2357. The examiner can normally be reached on Monday-Friday (9:00PM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rod Bovernick, can be reached on (571) 272-2344. The official facsimile number for regular and After Final communications is (571) 273-8300. The examiner's RightFAX number is (571) 273-2357.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Omar Rojas
Patent Examiner
Art Unit 2874

or
March 26, 2007



KEVIN WOOD
PRIMARY PATENT EXAMINER